

ABSTRACT OF THE INVENTION

A shifting apparatus for a marine propulsion device incorporates a magnetoelastic elastic sensor which responds to torque exerted on the shift shaft of the gear shift mechanism. The torque on the shift shaft induces stress which changes the magnetic characteristics of the shift shaft material and, in turn, allows the magnetoelastic sensor to provide appropriate output signals representative of the torque exerted on the shift shaft. This allows a microprocessor to respond to the onset of a shifting procedure rather than having to wait for actual physical movement of the components of the shifting device.